



November 4, 1997

97-RF-05611

Keith A. Klein
Deputy Manager, Technical Programs
DOE, RFFO

RESPONSE TO TRANSMITTAL OF ASSESSMENTS - REQUEST FOR CORRECTIVE ACTION COMMITMENTS ASSOCIATED WITH DEPARTMENT OF ENERGY, ROCKY FLATS FIELD OFFICE (DOE, RFFO) ASSESSMENTS - JAH-080-97

Refs: 1. K. A. Klein ltr (06211) to R. G. Card, Transmittal of Assessments, August 11, 1997
2. R. G. Card ltr (97-RF-05328) to K. A. Klein, Transmittal of Assessments, October 10, 1997

Dear Keith:

This letter is a follow up to the actions committed for Assessment 97-104-ESD-HAZ as outlined in the referenced letter 97-RF-05328.

ASSESSMENT 97-104-ESD-HAZ, FINDING 1: "Non-compliance with site Health and Safety Procedures and the Occupational Safety and Health Administration (OSHA) Hazard Communications Standards (29CFR 1910.1200), See Appendix C, Assessment Form 2, Finding CIM-2.1.

Response: This action has been completed.

Status: SSOC, RMRS, Dyncorp, and Wackenhut were given the Chemical Management Manual and a deadline schedule with no delays expected of December 31, 1997 for full implementation.

ASSESSMENT 97-104-ESD-HAZ, Finding #2: Lack of a comprehensive plan in response to the Chemical Vulnerability Assessment, September 1994. See Appendix C, Assessment Form 2, Finding CVA-1.1.

Response: Action for Finding #2: Kaiser-Hill will submit a formal report to the DOE, RFFO on the Site status of the five specific vulnerabilities and the eight general vulnerabilities identified in the September 1994, Chemical Safety Vulnerability Working Group Report by November 4, 1997. PATS #97-001682, Plan 2.

Status: This action has been completed and the report is attached.

Kaiser-Hill Company, L.L.C.

Courier Address: Rocky Flats Environmental Technology Site, State Hwy. 93 and Cactus, Rocky Flats, CO 80007 • 303.966.7000

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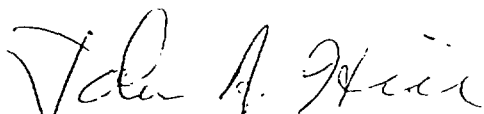
ASSESSMENT 97-104-ESD-HAZ, Finding #3: Inadequate demonstration of the existence of a site-wide program to assess chemical safety management. See Appendix C, Assessment Form 2, Finding CIM-1.1.

Response: The Environmental Compliance Assessment Program Procedure has been revised to include chemical safety assessments.

Status: This action is complete.

If you have any questions, please contact me at extension 6325.

Sincerely,



John A. Hill, Vice President
Environmental Management and Compliance
Kaiser-Hill Company, L.L.C.

JMM

Attachment:
As Stated

Orig. and 1 cc - Keith Klein

cc: Rich Schassburger, A&E, RFFO



KAISER - HILL
COMPANY

STATUS OF CHEMICAL VULNERABILITY AT THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

**RESPONSE TO:
ASSESSMENT 97-104-ESD-HAZ, FINDING #2**

**Prepared By:
Kaiser Hill Company, L.L.C.**

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Section 1: Chemical Safety Vulnerability Responses

1.1 Vulnerability Number: CSRV-RFP-000-01

Vulnerability/Observation: Lack of complete and accurate chemical inventories impeded the effective hazards posed to workers.

In 1994, the Rocky Flats chemical management system, known as the Chemical Control System, was located on the Site's main VAX computer system. This system was limited and did not allow individual Chemical Control Administrator's (CCA's) to update chemical inventory information. Under the old system, all information had to be updated by a designated data programmer; this prevented CCA's from being able to enter changes to their inventories in real time. In addition, CCA's could not easily generate routine reports or change chemical storage locations with the system. These VAX system limitations resulted in a situation where the current conditions of the facilities were not consistent with the information inventory control system.

A contributing factor to the inventory problem identified in 1994 was the authorized designation of "excess chemical". An "excess chemical" was considered a chemical that the user had no need for but was not declared waste. Thousands of chemical containers were identified as an "excess chemical". These chemicals essentially sat on the user's shelf and were not managed any further. In addition, many of these chemicals were moved from area to area without these moves being recognized in the chemical tracking system.

Kaiser-Hill Team Completed Actions: To address Chemical Inventory Vulnerabilities, the K-H team has completed the following actions.

1. Developed and implemented an Integrated Chemical Management System (ICMS). Server located within Bldg. T130C. The ICMS has the following advantages:
 - Provides chemical inventory data on product and waste chemicals in real time throughout the Site;
 - Includes a procurement module for approving chemical purchases;
 - Tracks data from procurement through disposal;
 - Allows for facility-level data input and management;
 - Includes chemicals that require special management module for tracking of potential reactive chemicals;
 - Includes information on each chemical container for waste disposal purposes.
2. Established chemical ownership at subcontractor and facility level.
 - Each of the Kaiser-Hill team members has implemented a chemical management program that includes responsibility for chemical inventory and tracking;
 - Each Kaiser-Hill team member is responsible for ensuring that chemical purchases go through the K-H chemical procurement program and then logging new chemicals into the ICMS upon delivery;
 - Each Kaiser-Hill team member is responsible for submitting information for SARA Title III reporting.
 - Each Kaiser Hill Team member has a company designated CCA to manage their company's chemicals. K-H meets weekly with the CCA's to discuss chemical management related activities.

3. Updated chemical inventories as a result of the waste management project, previous chemical round-ups, and further emphasis on chemical safety awareness as a result of identified reactive chemicals now include:
 - Tracking of RCRA and non-RCRA chemicals;
 - Tracking product and waste chemicals;
 - Identification of potentially reactive chemicals;
 - Routine reports and periodic updates.
4. Implemented bar coding/scanning technology to facilitate chemical tracking.
5. Bar code scanners are available for expediting chemical inventories;
6. Lap top computers have been programmed with software to document chemicals identified in chemical round-ups.
7. Initiated chemical round-up and procurement approval efforts to dramatically reduce the number of chemical containers that are currently tracked within the ICMS. These efforts will assist in improving chemical tracking and accuracy of chemical inventories by reducing the number of chemical containers that need to be tracked.
8. To date, approximately 25,000 waste chemical containers have been removed from site in FY97;
9. The number of product chemicals being tracked by the ICMS has reduced from approximately 50,000 chemical containers in June 1996, to approximately 23,000 in September 1997;
10. The number of chemical storage areas being tracked in ICMS has been reduced from approximately 3,000 in June 1996, to approximately 1,200 in September 1997.
11. Drafted a Chemical Safety Assist Visit (CheMSAV) Plan to ensure compliance with requirements. This plan identifies the Level 1 chemical safety requirements and provides a checklist for K-H team members to use for self assessments. K-H, as part of the Compliance and Performance Assurance Assessment Program, will evaluate accuracy of chemical inventories for K-H team members. In rare cases, reports of these visits may contain client-attorney privileged information and will be managed as such.
12. Canceled the "excess chemical" Management Plan. Chemical owners must now identify chemicals as either product or waste.

Kaiser-Hill Actions to be Completed:

1. Implement the Chemical Safety Assist Visit Program Plan by December 1, 1997.
2. Rewrite HSP Section 9.12, Chemical Tracking. Anticipated completion date; February 1, 1998.

1.2 VULNERABILITY NUMBER: CSRV-RFP-000-02

Vulnerability/Observation: Chemical hazards are provided disproportionately less management support than radiation hazards.

K-H has developed and implemented two sitewide programs that focus on-chemical safety. The Life Cycle chemical program is designed to manage all product chemicals from procurement through declaration as waste, and the waste chemical management program designed to implement the Waste Chemical Consent Order to manage or dispose of waste chemicals throughout RFETS. Overall chemical safety awareness was strengthened by performing a sitewide chemical assessment that identified issues such as chemical procurement control, inventory accuracy, and availability of Material Safety Data Sheets (MSDS).

Kaiser-Hill Team Completed Actions:

1. Implemented a sitewide chemical waste management program that includes each of the K-H Team members and is managed under the direction of the Environmental Management and Compliance Group.
 - K-H performs integration and oversight for the program;
 - Each of the K-H Team members has implemented a chemical management program under the direction of their company Environmental Manager;
 - Chemical management programs for each of the K-H team members have been adequately funded in FY97 and FY98;
 - K-H and DOE have signed a Consent Order for disposal and proper management of RFETS waste chemicals by December 1999;
 - Management has committed adequate funds over the next two and a half years to dispose and package waste chemicals covered by the Consent Order;
 - Approximately 25,000 waste chemical containers were shipped off site for disposal in FY97;
 - Treated and disposed of 73 reactive chemicals and disposed of numerous air and water reactive, and cyanides and sulfides that did not require treatment. In addition, 44 reactive chemicals were treated within regulatory guidelines in FY96.
2. Implemented a Chemical Life Cycle Program that establishes criteria and provides-oversight of site chemicals from procurement to declaration as waste. Main elements of the program include:
 - Procurement Control: A chemical procurement approval process was established to evaluate the hazards posed by the chemical, ensure use of on site supplies, identify potential reactive chemicals, and identify less hazardous alternatives.
 - Storage Site Closure and Consolidation: Emphasis on chemical storage reduction and consolidation. Through FY96, the number of chemical storage areas has been reduced by approximately 60% within the last 15 months;
 - Reactive Chemical Management: A reactive chemical identification and management program has been established and implemented. 117 reactive chemicals have been treated within the last 2 fiscal years;
 - Program Guidance: The administrative requirements for chemical management have been integrated into a Chemical Management Manual. The Chemical Management Manual has been distributed and will become effective as a Level I document on December 31, 1997.

Kaiser-Hill Actions to be Completed:

1. Implement the Chemical Management Manual by December 31, 1997.
2. Complete the Waste Chemical Project by December 1999 in accordance with the CDPHE Order on Consent.

1.3 Vulnerability Number: CSRV-RFP-000-03

Vulnerability/Observation: RCRA requirements are given precedence over chemical safety.

K-H recognizes that both RCRA and non-RCRA chemicals may pose a safety hazard. To address this concern, K-H has identified and safely treated or managed reactive chemicals, shipped offsite for disposal thousands of non-RCRA chemicals, and increased hazard communication and Site awareness of potential chemical hazards from all types of onsite chemicals.

Kaiser-Hill Team Completed Actions:

1. Reactive Chemical Management - The K-H Team performed a search for reactive chemicals throughout the site. Reactive chemicals that were identified were treated or managed safely within the required 14-day CDPHE requirement. The K-H Team has treated 117 reactive chemicals since 1996. A program is in place to continue to identify any additional reactive chemicals and treat/manage them in accordance with applicable requirements.
2. Waste Chemical Disposal - Completed disposal of 25,000 waste chemicals, of which 40 to 50% were non-RCRA chemicals. This effort is ongoing.
3. Chemical Safety Awareness - Improved chemical hazards communication throughout the Site to inform employees of both RCRA and non-RCRA chemical safety issues.
 - Initiated a chemical management steering committee to discuss chemical management issues with K-H team members on a weekly basis.
 - Initiated special chemical safety meetings; held a chemical safety "stand down" in July 1996 to communicate reactive chemical concerns;
 - Implemented and distributed a chemical Safety Meeting Kit, which is now an annual requirement;
 - Distributed chemical safety posters throughout the site informing site personnel of potential hazards with unknown chemical hazards.
4. Chemical Hazard Analysis - Implemented a proactive sitewide review of hazardous chemicals in response to the Hanford PFP explosion

Kaiser-Hill Actions to be Completed:

None

1.4 Vulnerability Number: CSRV-RFP-000-04

Vulnerability/Observation: Deterioration of facility physical condition has the potential to create chemical safety hazards.

As the Site accelerates closure activities, chemical safety is a concern in facilities scheduled for deactivation and decommissioning (D&D), facilities changing ownership and missions, and idle facilities awaiting closure. To address these chemical safety concerns, K-H has completed the following actions.

Kaiser-Hill Team Completed Actions:

1. Reactive Chemical Management - K-H has identified and safely managed/stored reactive chemicals located in deteriorating buildings. We have treated 117 reactive chemicals since 1996 and disposed of numerous air and water reactive chemicals, cyanides and sulfides that did not require treatment.
2. Waste Chemical Management Consent Order - K-H has implemented the Waste Chemical Management program in accordance with requirements of the Consent Order. All waste chemicals identified in the Consent Order will be managed/disposed by December 1999. The Waste chemical program has prioritized chemical management to reduce risk of chemicals in deteriorating facilities.
3. CCA Oversight - CCAs continue to review Site facilities on an ongoing basis to identify any chemicals in unsafe or deteriorating facilities. If potential safety issues are found, the CCAs arrange for the materials to be properly and safely managed in accordance with applicable safety and environmental requirements.
4. Idle Equipment Management - An Idle Equipment Management Program has been implemented. The idle equipment program addresses equipment that contains RCRA-regulated chemicals and addresses the plans to manage them and eventually dispose of the chemicals.
5. Process Lines and Tanks - Buildings have initiated efforts to manage chemicals within tanks and process lines; buildings have generated data bases to track chemicals in tanks and lines and, in many instances, have written health and safety plans to address specific chemical concerns associated with tanks and process lines. Many process lines and tanks have been emptied of chemicals to avoid potential hazards.
6. Chemical Storage Area Reduction: Kaiser-Hill has focused on eliminating chemical storage in areas that, if an accident were to happen, would pose an increased risk to the facility. Chemical storage in radiological areas and outside storage has been targeted for chemical reduction.

Kaiser-Hill Actions to be Completed:

None

1.5 Vulnerability Number: CSRV-RFP-000-05

Vulnerability/Observation: Decisions on budget and priorities delay correction of known chemical safety vulnerabilities.

The K-H Team has fully funded chemical safety and chemical management programs since FY96 and intends to fully fund safety and chemical management in the future. Safety is of the highest concern to all K-H Team members, and chemical management and safety issues are routinely reviewed by the Site's senior management. If known safety vulnerabilities are identified they are corrected.

Kaiser-Hill Team Chemical Management Budget Allocation:

1. Waste chemical removal project is funded at \$7.7 Million in FY98.
2. Reactive chemical management program was fully funded in FY97 and is fully funded in FY98.
3. Chemical Life Cycle Program is funded in FY98.

Kaiser-Hill Actions to be Completed:

None.

2.0: EIGHT GENERAL CHEMICAL VULNERABILITIES

2.1 Generic Vulnerability #1: Characterization of Chemicals

In 1994, the site operated with a chemical designation of "excess." This is not a recognized regulatory term and allowed chemical owners to leave chemicals on shelves without having to characterize them or declare them as waste and manage them as waste. K-H has eliminated the "excess" chemical designation and now chemicals are characterized as product or waste, characterized as to chemical type (e.g. chemical name, hazard class, etc.,) entered into the Integrated Chemical Management System, and managed in accordance with all applicable requirements.

Kaiser-Hill Team Completed Actions:

1. Over 80,000 waste chemicals were identified in FY97. These chemicals are required to be managed in accordance with all applicable requirements.
2. Reactive chemicals were treated in FY97. In addition approximately 4,000 various chemical containers were characterized for potential reactivity during chemical round-up operations and during routine reviews of chemicals on site.
3. Approximately 25,000 waste chemical containers have been properly containerized, packaged, and removed from site.
4. Characterization of chemicals continues in support of the waste chemical program and the reactive chemical management program.
5. Availability of MSDS for proper characterization of chemicals has been greatly enhanced through floor level compliance assessments and provision of MSDS information via electronic distribution.
6. Chemical procurement requests include a review for potential reactive chemicals. If a potential reactive chemical is necessary to perform a site operation, a special management plan is required by the chemical user. The requirements of purchasing a potentially reactive chemical are identified in the Chemical Management Manual.
7. The number of identified product chemicals has been reduced from approximately 50,000 in June 1996 to approximately 23,000 in September 1997 in part due to proper characterization.
8. The K-H Team took aggressive steps to evaluate chemical concerns associated with the Hanford PFP explosion. A July 1997, DOE-RFFO assessment of chemical management in response to the Hanford event indicated that K-H's review of Site facilities met the expectations of DOE-RFFO.
9. Solid mixed residues are managed in accordance with the Site's Part B RCRA Permit and the Residue Stabilization Program. Liquid mixed residues are being managed under the Mixed Residue Tank System Management Plan and the Liquid Stabilization Program.

Kaiser-Hill Team Actions to be Completed/Concerns:

1. To date, K-H has identified more than 380 drums of waste chemicals packaged by EG&G which require repackaging. Repackaging is necessary due to compatibility and characterization concerns. These drums will be managed in accordance with the waste chemical management program.
2. Not all Site chemicals currently stored in cargo containers have been properly characterized. As part of the Hanford review, K-H team members will characterize chemicals stored in their cargo containers in FY98.

2.2 Generic Vulnerability #2: Unanalyzed Hazards

The May 14, 1997, Hanford incident resulted in a proactive review of chemicals and chemical storage at RFETS. The review included a review of all chemical storage areas to evaluate chemical risks at RFETS. The DOE, RFFO July assessment identified K-H's review to be a "rapid and thorough response to the Hanford Explosion."

Kaiser-Hill Team Completed Actions:

1. Kaiser-Hill has initiated a reactive chemical management program that describes and requires proactive identification and management of potential reactive chemicals.
2. The Site's RCRA permit, negotiated by Kaiser-Hill and CDPHE, requires Priority 1 (as defined by CDPHE) reactive chemicals to be managed within 15 days.
3. Each building that undergoes D&D is required to have an extensive hazards analysis section in the D&D plan which includes activity hazard analysis, integrated safety management, and enhanced work planning elements.
4. In September/October 1996, K-H initiated a search of potentially reactive chemicals located throughout the site that were stored in cargo containers, outdoors flammable storage lockers, and buildings. This search identified approximately 40 reactive chemicals that were treated within regulatory guidelines.
 - As a part of this search, a number of chemical concerns were identified in regard to incompatible storage, improper storage of flammables, and the identification of unknown chemicals.

Kaiser-Hill Actions to be Completed/Concerns:

1. There are still chemicals that are stored in uncontrolled conditions, mainly in cargo containers. Proper analysis of the hazards that these chemicals may pose is an ongoing effort. These chemicals will be managed as part of the waste chemical management program. Incompatible and improper chemical storage. Storage is evaluated during the assessments by K-H Environmental Management and Compliance.
2. Kaiser-Hill's reactive chemical management program continues to evaluate and identify potential chemical risks associated with both waste, product, and newly procured chemicals.

2.3 Generic Vulnerability #3: Past Chemical Spills

Previous chemical spills at RFETS are identified in the Site's Historical Release Report that is maintained by Rocky Mountain Remediation Services.

Kaiser-Hill Team Accomplishments/Requirements:

1. Kaiser-Hill has initiated requirements for properly managing and reporting chemical spills. These requirements include Health and Safety Practices Manual HSP 21.03, the Site's RCRA Permit, and the Site's Hazardous Wastes Requirements Manual.
2. Kaiser-Hill provides trained personnel on-call 24-hour a day, 365-day/year, to assist the Shift Superintendent in chemical spill issues. Spill reporting capabilities are fully funded in FY 98.
3. Kaiser-Hill responded to 111 chemical spills in FY97. Of these 111, 41 met the criteria for reportability and were reported to the CDPHE within regulatory requirements and time frames.
4. RMRS has reviewed the 11 reportable spills and has updated the site's historical release report as necessary.
5. All remediation of soils previously contaminated by historical releases is required to be performed in accordance with applicable health and safety requirements. Additional sampling is performed as needed to provide sufficient data to evaluate health and safety concerns.

Kaiser-Hill Actions to be Completed/Concerns:

None

2.4 Generic Vulnerability #4: Planning for Disposition of Chemicals

Upon assuming management control of the Site, the K-H Team took actions to address the large number of chemicals left over from production and chemicals defined as "excess" chemicals. K-H obtained additional resources to assist in identification and disposal of the chemicals, and "self-reported" to CDPHE on the status of RCRA-regulated chemical and "Excess" chemicals at the Site. Based on the results of the self-disclosure, a Consent Order was issued by the regulators to address management of waste chemicals at RFETS. The Consent Order provides the regulatory framework for the compliant management and/or disposal of all RCRA waste chemicals by December 1999. Non-RCRA waste chemicals are also being managed within the Consent Order framework.

Kaiser-Hill Team Completed Actions:

1. In accordance with the CDPHE Order on Consent, Kaiser-Hill has established a waste chemical project plan to dispose or place in permitted storage all waste chemicals by December 1999. It is anticipated that approximately 80,000 waste chemicals will be disposed of and packaged for disposal by December 1999.
2. The waste chemical project plan is funded for approximately \$7.7 million in FY98.
3. Kaiser-Hill has already disposed of approximately 25,000 chemical containers in FY97 and packaged approximately 2,000 additional for off site disposal

Kaiser-Hill Team Actions to be Completed/Concerns:

None

2.5 Generic Vulnerability #5: Chemical Storage Practices

Proper management of chemicals in storage is still a concern at RFETS. However, K-H believes that the aggressive actions to reduce chemical storage areas on site will assist in the improvement of chemical storage practices. Once the number of chemical containers are reduced, proper management of those supplies will be easier to monitor. K-H has identified incompatible storage, improper storage of flammables, and chemicals being stored outside in uncontrolled conditions, i.e., cargo containers in recent assessments.

Each chemical storage area is assigned an identification number by the K-H chemical management program manager. Chemicals can only be stored in approved chemicals storage locations. These chemical storage areas are under the responsibility of the chemical control administrator for that specific area or building. By assigning specific identification numbers for storage locations, only those areas approved for proper chemical storage will be provided a number. Each CCA is required to ensure that chemical storage area are inspected and comply with site requirements.

Any new Chemical Storage area must be approved by K-H. It is K-H's intention to continually reduce the number of areas where chemicals are stored. However, there have been a small number of instances where new chemical storage areas need to be opened. In most cases, new chemical storage areas are needed for consolidated storage of waste chemicals that are managed under the Waste Chemical Consent Order.

Kaiser-Hill Team Completed Actions:

1. The number of chemical storage areas has been reduced by approximately 60% (from 3,000 to 1,200) within the last 15 months. This reduction will help to consolidate chemical storage areas and facilitate compliant management.
2. Approximately 3,000 chemical containers, including many flammables, were removed from a single chemical storage area in Building 551.
3. Chemical storage requirements are included in the Health and Safety Practices Manual which has been distributed to all applicable parties.

Kaiser-Hill Team Actions to be Completed/Concerns:

1. Chemical storage outside of buildings still a concern. Many of these concerns will be alleviated as waste chemicals are shipped offsite and storage areas are closed.
2. Chemicals stored in cargo containers that have not been fully characterized pose a concern to the Kaiser-Hill team. These concerns have been identified and an action plan has been drafted by the K-H team members to inspect their cargo containers in FY98.
3. There is a continued effort to ensure that chemicals are stored compatibly. Chemical storage compatibility will be a component of the CheMSAV assessments to be performed in FY98.

2.6 Generic Vulnerability #6: Conditions of Facilities and Safety Systems

The mission of the site has changed and the accelerated deactivation and D&D of the Site is in progress. Removal of chemicals from these buildings is a major activity in the D&D of site buildings. K-H determined that the best way to reduce risk was to either find another beneficial reuse of chemicals or dispose of the chemicals as waste. K-H safely disposed of approximately 25,000 waste chemical containers and packaged for disposal an additional 2,000 containers in FY97. The recently signed Consent Order requires the removal of current waste chemicals by December 1999. It is anticipated that approximately 60,000 additional chemical containers will be removed from site in accordance with the Consent Order. Also, see Section 1.4 CSRV-RFP-000-04.

Kaiser-Hill Team Completed Actions:

The DOE Office of Oversight, Environment, Safety and Health performed a follow-up review of RFETS safety systems. In a separate action, DOE updated the Site Profile Document during the last six months.

DOE evaluations related to this topic include:

1. The DOE Oversight Integration Team Follow-up Review recently evaluated the site's status regarding vital safety systems, authorization basis, and Plutonium Vulnerability.
2. The DOE EH Site Profile Document covers a number of Site issues and current status of resolution.

Each of these assessments noted significant improvement in the condition of safety systems within site facilities. K-H's Chemical Management Program has heightened Chemical Safety Awareness and has mandated implementation of necessary management systems and tools to properly manage waste chemicals.

Kaiser-Hill Team Actions to be Completed/Concerns:

None.

2.7 Generic Vulnerability #7: Abandoned and Residual Chemicals

K-H identified that abandoned chemicals have been a concern since assuming management of the Site. K-H has identified more than 80,000 waste chemicals for proper management. K-H also initiated a proactive search for potential reactive chemicals from September/October 1996 and identified approximately 25 reactive chemicals in abandoned cargo containers that were safely treated and dispositioned.

K-H and DOE have recently signed a Chemical Management Consent Order with CDPHE to address management of waste chemicals. This Order allows the Site to systematically round-up waste chemicals using a facility cluster approach. To facilitate this approach, the K-H Team has developed an inventory that includes all product and waste chemicals to be managed under the Company.

Kaiser-Hill Team Completed Actions:

1. A large number of abandoned chemicals have been identified within areas used by former maintenance subcontractors. Kaiser-Hill Construction Management has added a chemist to their staff to address chemical-related issues regarding abandoned chemicals.
2. The abandoned chemicals in the Building 779 R&D laboratory were collected and disposed in March 1997.
3. Approximately 2,500 abandoned chemical containers that were left in the Building 663 Laydown yard were identified and disposed in FY97.

Kaiser-Hill Team Actions to be Completed/Concerns:

1. Residual chemicals may still remain in piping. K-H is identifying affected piping.

2.8 Generic Vulnerability #8: Inventory Control and Tracking

See response to Section 1.1 -CSRV-RFP-000-01.